

### **Abstract of the Disclosure**

An apparatus for reforming rod-shaped, electrically conductive and/or magnetizable materials, in particular for drawing and extruding, having the following features: the apparatus has a female mold having a die, which forms the tool for reforming; the apparatus has an inductor of an electric linear motor, by means of which a traveling electric field can be produced; the inductor includes at least one first group at least with first coils; the first coils in the first group are arranged axially next to one another and thus form a channel; using the inductor it is possible to produce a traveling field in the channel which has a magnetic flux density having a gradient in the axial direction of the channel, which has an amplitude of greater than  $B = 1 \text{ T}$ .